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February 22, 2012

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Basic Service Tier Encryption, MB Docket No. 11-169, PP Docket No. 00-67

Dear Ms. Dortch:

Bend Cable Communications, LLC ("BendBroadband") submits this letter to supplement the record in support of the Commission's proposal to permit cable operators to encrypt their basic tier of programming. BendBroadband completed its transition to an all-digital network in January 2009 and provides service to approximately 35,000[1] customers in central Oregon. All of our video subscribers have set top devices and/or CableCARDs. The transition for our company occurred over 2 years with many benefits accruing to our customers, including improved pictures, a better TV guide, access to parental controls, faster internet speeds, more robust HD offerings, and interactive features like video on demand for PEG, along with movies and other shows. Today more than one in eight of our internet customers – approximately 4,400 internet customers – now purchase broadband services without taking our video services. Those 4,400 homes homes are currently able to view all of our unencrypted programming without subscribing or paying for it, enabling theft of service and causing concern about content protection.

Therefore, as we explained in our prior comments, we believe it is necessary to encrypt our basic tier because doing so would save approximately $700,000 in avoided costs of traps, allow simplified network management, reduce the environmental impact of 2000 additional truck rolls per year, and enable us to provide better, faster, and more reliable service to all of our video, data and voice customers.[2]

[1] BendBroadband serves about 40,000 customers with 35,000 video and 35,000 internet customers.

[2] *See* Comments of BendBroadband (Nov. 28, 2011). If the Commission will not permit us to encrypt our basic tier, we would initially place traps at each of the approximately 4400 homes of customers that subscribe to our broadband services but not video services. We would subsequently need to perform multiple additional truck rolls every business day to place traps at additional homes that drop video service and to remove traps from trapped homes that add it. Our estimate does not include additional costs we are likely to incur if we need to make changes in our traps to accommodate changes in our service lineups or technology, such as changed channel allocation to accommodate more bonding to provide higher speed broadband services. Also, traps are old analog technology and mask our ability to monitor our network to quickly find and solve performance issues that degrade speeds, phone calls or video quality.

Much of the discussion in this docket has focused on the fact that if a cable operator encrypts its basic tier, customers will need a set-top box or CableCARD for each television. Critics of the Commission's proposal to allow encryption argue that encryption would "force millions of users to rent set-top boxes."[3] Montgomery County, Maryland argues that the Commission should assume that a "sizeable number of subscribers would be impacted" since "only 77%" of cable customers have at least one set-top box already.

These erroneous conclusions that numerous customers would be affected are based upon a misunderstanding of the dynamic in which a cable operator would encrypt its basic tier. Cable operators would use encryption either in conjunction with or after converting their system to an all-digital system. The data we presented in this proceeding shows that when a cable operator transitions to an all-digital network, its customers voluntarily obtain set-top boxes for nearly every television even if the operator does not encrypt its basic tier. BendBroadband is all-digital but we do not encrypt our basic tier. One hundred percent of our customers already have at least one set-top box or CableCARD in their home, and the average customer household has 2.7 such devices. It is true that a few of these households may have additional working clear QAM televisions on which they might watch basic programming, but BendBroadband already provided statistical analysis based on the Cablevision case that estimates this number of subscribers at only 35.[4] That figure is a far more accurate estimate than Boxee's baseless suggestion that "millions" of consumers would be affected nationally.

In its ex parte presentation, Boxee claims approximately 2 million subscribers worldwide. Most of these two million users do not access U.S. cable service using clear QAM because they are in other countries, or because they access video service over the air or from satellite providers, or because they do not also use the Boxee Live TV dongle to access live television. But even if 1% of U.S. cable subscribers use Boxee to watch live TV (and the real number is likely much lower), one percent of BendBroadband's 35 customers who could be affected by encryption is rounded to zero.

BendBroadband rents set-top boxes for as little as $2 per month.[5] Even if there are a few Boxee users who would need to start paying $2 per month for a set-top (or $0, if the Commission applies its proposed equipment conditions to small operators), it is absurd for Boxee to suggest that the "problem" of at most a handful of customers needing one more $2 set-top box should be "addressed using cable traps."[6] The total aggregate amount of money that would be spent over four years by 35 customers on $2/month set-top boxes is $3,360, compared to $700,000 for traps.

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[3] Boxee ex parte presentation, Feb. 1, 2012, at slide 8.

[4] See BendBroadband Comments at 6. When Cablevision began encrypting its basic tier, the Commission's waiver conditions required that it provide free set-tops to similarly affected consumers, and only one-tenth of one percent of the affected customers requested such free devices. One tenth of one percent of BendBroadband's 35,000 video subscribers is 35 customers.

[5] In our November comments, we reported a rental price of $2.25 for a basic two-way set-top box. That price has increased to $2.50, but we are very soon introducing one-way HD DTAs for $2 per month.

[6] Boxee ex parte, Feb. 16, 2012 at 2.

It is even more absurd for Boxee, a company that claims approximately two million customers, to ask the FCC to order a company like BendBroadband with 35,000 customers to completely redesign our network to provide Boxee with a free "standard encrypted IP feed of broadcast channels" so that they won't have to face any inconveniences in selling products that are supposedly designed to lure consumers away from our services.

Similarly, the fact that there may be a few affected Boxee users does not justify the 2000 additional truck rolls that could be eliminated by encryption, or the handcuffs that traps would put on our flexibility to make changes to our spectrum management plans, channel lineups, and service offerings. Traps are old analog technology and we have avoided installing them in our system. These traps would have to be built for our current configuration. Unless they are replaced, we would have no flexibility to alter our spectrum allocation in the future, to bond more channels to provide faster broadband speeds, or reallocate video and data spectrum as customer needs change, for example. Our ability to adapt to the needs of our customers would, in effect, be blocked by traps.

Traps, by their very nature of filtering certain RF signals, impede the ability for a cable operator to diagnose, repair, and manage the cable system, because they prevent not only reception of unauthorized video services but can also block the tools we use to manage our network. For example, traps can inhibit tools (such as CPD Hunter) used to detect and manage ingress (the damaging and service-impacting stray signals that come from a customer's home into the cable system). Traps also reduce the effectiveness of our CLI tagging tools used to detect egress because they filter or block important management tools. More ingress and egress noise may impact network performance and the quality of our broadband, video, and telephone services. For example, the reduction of effectiveness of these tools could reduce our broadband speeds at peak utilization periods.

Due to their size and weight, traps pose a physical risk to the cable plant. A trap designed for BendBroadband's current system configuration weighs more than six ounces and measures over four inches in length. This trap device hanging from a cable tap during strong winds, ice storms, or moving vegetation can result in breaks, strain, or proximity wear on the coax cable that could cause customer service outages or difficult to isolate network noise and common path distortion. Traps placed in an above-ground plant are a significant and unnecessary risk; traps located inside pedestals also pose a risk of damage and strain due to crowding in close quarters as pedestals were not designed to house these devices. In summary, traps introduce another point of failure in our network that will cause customer impact.

Among other benefits, the digital cable system provides two advantages over the analog cable system. First, it allows simplified management by creating digital channel maps with conditional access. Second, digital systems permit efficient management of spectrum resources. Traps, which were designed for analog systems, undermine both of these two fundamental advantages of a digital cable system. It is a technological setback to put traps on a digital cable

system which is already using far superior conditional access, and they cripple the spectral efficiency that is the primary goal of a digital network.

It would be beyond confounding for the Commission, in the name of making it slightly more convenient for a very small number of consumers to use a new device, to hobble cable operators and their millions of customers nationwide with a more primitive technology indefinitely (or even for any further length of time at all). It would be all the more so to do this to BendBroadband, serving 35,000 customers, while not imposing any such restriction on DirecTV or DISH, which together serve more than 33 million customers. The cost-benefit analysis, measured for consumers overall, easily demonstrates that the Commission should permit encryption without further delay.

The handful of Boxee users who view unencrypted basic programming without a set-top box have viable alternatives. The most obvious is that they can do what all of the 33 million DBS subscribers already do, which is lease a set-top box for as little as $2/month. Boxee could also include a CableCARD slot in its devices, which is the method that the Commission created exactly for the purpose of allowing third party manufacturers to build set-top boxes that could access cable programming. BendBroadband has successfully deployed more than 560 CableCARDs for use by customers in other devices, and has incurred costs in excess of one million dollars to comply with the Commission's CableCARD regulations.[7] Our customers have already borne the cost of enabling third-party devices for use by a small number of users, and should not have to pay again simply because one manufacturer wants to take a different path to save a much smaller amount of money than their proposed alternative would cost all other customers.

Even if Boxee does not want to put a CableCARD slot into its devices, Boxee users could effectively provision their own CableCARD slot by purchasing a CableCARD tuner from a company such as Ceton, Hauppauge, or Silicon Dust and connecting it to their Boxee through a personal computer. Boxee devices are already typically connected to a computer by Ethernet or wirelessly in order to access Internet-based content.[8] The Hauppauge dial-tuner CableCARD DVR is available on Amazon for $112.[9]

Another problem with Boxee's argument, if it were actually true, is that it proves too much. If it were really true that a substantial number of consumers were interested in using a Boxee box to access basic cable programming but were satisfied (because of other programming received from their Boxee or over their broadband service) not to have access to a cable operator's expanded video services, that would be all the more reason for a cable operator to be

[7] Although it has a partial waiver from the integration ban, BendBroadband has deployed more than 20,000 CableCARD devices, at an additional cost of much more than $50 per set top box device.

[8] http://support.boxee.tv/entries/20723406-connecting-the-boxee-box-to-the-network.

[9] http://www.amazon.com/Hauppauge-WinTV-DCR-2650-Tuner-Cable/dp/B005FPT38A/ref=sr_1_1?ie=UTF8&qid=1329620776&sr=8-1.

concerned about the prospect that an increasing number of consumers would simply not purchase any service at all from the operator and instead access unencrypted basic programming without paying for it. Twelve percent of BendBroadband's broadband Internet customers do not purchase any video service from us, and without traps we are unable to stop them from accessing our unencrypted basic tier. This percentage is likely to continue to grow because of the increasing availability of alternative video programming over our broadband service. BendBroadband has invested millions of dollars to become all-digital, launch 100 mbps DOCSIS 3.0 broadband service, and support more than 100 HD channels in its small-market communities in central Oregon. Encryption is the best means of protecting our investments in a cost-effective, technology forward manner so that we can continue to make improvements in delivering next-generation capabilities and services to our customers.

Finally, Hauppauge repeats the fallacy that cable operators' desire to encrypt services is simply a ruse to make more money by renting more set-top boxes. Today we rent 2.7 boxes per home, most of which are DCT-700 devices that we lease for $2.50 per month. There is very little room for growth in set top rental left. Nor would any growth be lucrative; customers needing a new box because of encryption could rent DTAs from us for as little as $2 per month. Our support of encryption of basic programming is not motivated by set-top rental revenue; it is about preventing expense and not undermining the benefits of an all-digital network. We support the rule change because it provides us with the flexibility to choose how we deliver and protect our basic programming and more importantly it will enable us to manage our over 1800 miles of Hybrid Fiber Coax plant with tools designed for today's digital world so we can provide the best quality of service to our customers.

Allowing all-digital cable operators to encrypt basic programming will not adversely affect the vast majority of cable subscribers, and the benefits that will result far exceed in the aggregate the modest additional costs that could be experienced by the tiny handful of consumers. The public interest balance therefore weighs in favor of granting this long overdue relief from the Commission's outdated analog-era regulation.

Sincerely,

Amy C. Tykeson